APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,643	11/24/2003	Sundaresan Ramamoorthy	200208157-1	9724

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EXAMINER
PATEL, CHIRAG R

ART UNIT	PAPER NUMBER
2141	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/723,643	RAMAMOORTHY, SUNDARESAN
	Examiner	Art Unit	
	Chirag R. Patel	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 11/24/03 *OrL 7/20/07*

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 12 and 13 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As per claim 12 discloses "determining a response time of servers not discovered", "calculating stress factors for each of the servers not discovered" , "servers not discovered" Likewise claim 13 recite "servers not discovered". A review of applicants specifications recite per [0016], "It is not required that server discovery is performed by the load balancing agent 170a, 170b; another component may perform the server discover and inform the load balancing agents 170a, 170b." The above passage still recites that the servers are discovered. Applicant's disclosure fails to disclose or even hint disclosing servers not discovered.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12 and 13 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As per claim 12 and 13, this statement indicates that

the invention is different from what is defined in the claim(s) because the passages as

explained under 35 USC 112 1st from the applicant's specification client clearly shows

that the servers are discovered.

As per claims 12 and 13, the phrase "determining a response time of servers not

discovered", "calculating stress factors for each of the servers not discovered" , "servers

not discovered" is a negative limitation that attempts to claim the invention by excluding

what the inventors did not invent rather than distinctly and particularly pointing out what

they did invent. See MPEP 2173.05(i)

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-11 and 14-19 are rejected under 35 U.S.C. 102(e) as being anticipated

by Kazemi et al. – hereinafter Kazemi (US 7,089,281).

As per claim 1, Kazemi discloses a method of dynamically balancing load in a

system of servers, comprising:

a) monitoring for servers that are able to respond to requests directed at the

system; (Col 15 line 64 – Col 16 line 8)   .

b) determining a performance metric for servers discovered by said monitoring

for the servers; (Col 6 lines 25-40)

c) maintaining a table comprising said performance metric for said discovered

servers; and (Col 16 lines 17-24)

d) in response to receiving a request, routing said request to a selected server in

the system of servers based on said performance metric, wherein the system of servers

comprises the discovered servers. (Col 16 lines 48-57)

As per claim 2, Kazemi discloses the method of claim 1, further comprising:

determining a load on ones of the servers in the system of servers. (Col 16 lines 48-57)

As per claim 3, Kazemi discloses the method of claim 2, further comprising:

determining a stress factor for a given server based on the performance metric of the

given server and the load on the given server. (Col 15 lines 49-63)

As per claim 4, Kazemi discloses the method of claim 1, further comprising:

determining a stress factor for ones of the servers in the system of servers based on the

performance metrics. (Col 15 lines 49-63, Col 16 lines 48-57)

As per claim 5, Kazemi discloses the method of claim 1, wherein the performance metric is a response time. (Col 6 lines 25-40)

As per claim 6, Kazemi discloses the method of claim 1, wherein the performance metric is a response time when the servers discovered by said monitoring are unloaded. (Col 6 lines 25-40)

As per claim 7, Kazemi discloses the method of claim 2, further comprising: determining a stress factor for a given server based on the performance metric of the given server and the load on the given server. (Col 16 lines 17-24)

As per claim 8, Kazemi discloses a method of dynamically balancing load, comprising:

a) dynamically discovering servers that are able to respond to requests directed at a system; (Col 15 line 49 – Col 16 line 8)

b) determining a response time of each of the discovered servers; (Col 6 lines 25-40)

c) calculating stress factors for each of the discovered servers, based in part on said response time; (Col 15 lines 49-63)

d) receiving a request to the system; (Col 16 lines 17-24)

e) determining a server in the system to route the request to based on the stress factors, wherein the system comprises the discovered servers; and (Col 16 lines 17-24)

f) routing said request to said server in the system determined in said e). (Col 16 lines 17-24)

As per claim 9, Kazemi discloses the method of claim 8, wherein said b) comprises determining a response time for each of the discovered servers to a request. (Col 6 lines 25-40)

As per claim 10, Kazemi discloses the method of claim 8, wherein said b) comprises determining a response time for each of the discovered servers to a database query. (Col 6 lines 25-40)

As per claim 11, Kazemi discloses the method of claim 8, wherein said c) comprises calculating the stress factor for each of the discovered servers, based on said response time and a load for each of the discovered servers. (Col 15 lines 49-63)

As per claim 14, Kazemi discloses a system for balancing load, comprising:

a plurality of back-end servers that are able to service requests to the system; (Col 16 lines 17-24; Figure 2:item 210)

a front-end server having a load balancing agent comprising a table, wherein said front-end server receives requests that are forwarded to said back-end servers, and wherein said load balancing agent is operable to: (Col 16 lines 17-24, Col 16 lines 48-57)

monitor for back-end servers that are able to service requests to the system; (Col 15 line 64 – Col 16 line 8)

determine a performance metric for the back-end servers discovered by the monitoring; and (Col 6 lines 25-40)

determine a server of said back-end servers to route a request to based on the performance metric. (Col 16 lines 48-57)

As per claim 15, Kazemi discloses the system of claim 14, wherein said load balancing agent is further operable to determine a load on a given back-end server. (Col 16 lines 48-57)

As per claim 16, Kazemi discloses the system of claim 14, wherein said load balancing agent is further operable to determine a stress factor for ones of the back-end servers. (Col 15 lines 49-63, Col 16 lines 48-57)

As per claim 17, Kazemi discloses the system of claim 16, wherein the stress factor for a given one of the back-end servers is based on the performance metric and the load on a given of the given one of the back-end servers. (Col 15 lines 49-53)

As per claim 18, Kazemi discloses the system of claim 17, wherein said load balancing agent is able to determine which server of said back-end servers to route a request to based on the stress factor. (Col 16 lines 17-24)

As per claim 19, Kazemi discloses the system of claim 14, wherein the

performance metric is a response time. (Col 6 lines 25-40)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 12-13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kazemi (US 7,089,281) in view of Bonnell et al. – hereinafter Bonnell (US

2002/0178262).

As per claim 12, Kazemi discloses the method of claim 8 determining a response

time and calculating stress factor each of the servers. (Col 6 lines 25-40; Col 15 lines

49-63) Kazemi fails to disclose said (b) further comprises determining a response time

of servers not discovered in said a); said c) comprises calculating stress factors for each

of the servers not discovered in said a), wherein the system further comprises the

servers not discovered in said a). Bonnell discloses said c) comprises calculating stress

factors for each of the servers not discovered in said a), wherein the system further

comprises the servers not discovered in said a). ([0011]) At the time the invention was

made, it would have been obvious to a person of ordinary skill in the art to comprises

calculating stress factors for each of the servers not discovered in said a), wherein the

system further comprises the servers not discovered in said a in the disclosure of

Kazemi. The motivation for doing do would have been to dynamically reacts to

changing user needs at the enterprise level ([0007])

As per claim 13, Kazemi discloses the method of claim 8. Kazemi fails to

discloses wherein said servers not discovered in said a) are reported to a load-

balancing agent in a configuration file. Bonnel discloses wherein said servers not

discovered in said a) are reported to a load-balancing agent in a configuration file.

([0011]) At the time the invention was made, it would have been obvious to a person of

ordinary skill in the art to disclose said servers not discovered in said a) are reported to

a load-balancing agent in a configuration file in the disclosure of Kazemi. The

motivation for doing do would have been to dynamically reacts to changing user needs

at the enterprise level ([0007])

As per claim 20, Kazemi discloses the method of claim 17. Kazemi fails to

disclose wherein said load balancing agent is able to include back-end servers that the

load balancing agent did not discover in the determination of which server to route the

request to. Bonnel discloses wherein said load balancing agent is able to include back-

end servers that the load balancing agent did not discover in the determination of which

server to route the request to. ([0011]) At the time the invention was made, it would

have been obvious to a person of ordinary skill in the art to disclose wherein said load

balancing agent is able to include back-end servers that the load balancing agent did

not discover in the determination of which server to route the request to in the

disclosure of Kazemi. The motivation for doing do would have been to dynamically

reacts to changing user needs at the enterprise level ([0007])


Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chirag R Patel whose telephone number is (571)272-

7966. The examiner can normally be reached on Monday to Friday from 7:30AM to

4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Rupal Dharia, can be reached on (571) 272-3880. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

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http://pairdirect.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197

(toll free).

Chirag Patel
Patent Examiner
AU 2141

C.P. C.P.
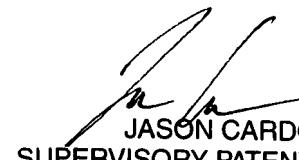
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SUPERVISORY PATENT EXAMINER